

**REMARKS**

Claims 1-11 are pending in the application. Claims 1-11 stand rejected in the referenced office action.

Independent claims 1 and 10 have been amended to specify that the coded signal includes information about an activation time of the seismic source. Support for this amendment is found in paragraph [0014] of the application.

Independent claim 11 has been amended to specify that the coded signal includes an arbitrary pattern. Support for this is found in paragraph [0014] of the application.

The claims have also been amended by replacing the plural with the singular wherever appropriate.

No new matter has been added by the amendments. Reconsideration of the application as amended is respectfully requested. The Examiner's rejections are addressed below in substantially the same order as in the office action.

**REJECTIONS UNDER 35 USC § 103**

Claims 1-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Cecconi et al.* (US 6,614,718) in view of *Andersen* (US 5,410,517) and *Robbins* (US 6,131,694). Claims 1, 10 and 11 are independent claims.

In order to sustain a rejection under 35 USC § 103, the prior art of record must separately disclose all the elements of the claimed invention. In addition, there must be a teaching or suggestion in the prior art of record to combine the references to come up with the claimed invention.

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Claim 1 as amended includes a specification that the coded signal includes information about an activation time of the source. The Examiner is relying on the *Andersen* reference for a teaching of the use of coded signals. Applicant respectfully submits that there is no teaching or suggestion in *Andersen* that the swept-frequency signals disclosed therein include information about a source activation time.

Thus, the first requirement for a rejection under 35 USC § 103 is not met. Accordingly, applicant respectfully submits that claim 1 and claims 2-9 that depend upon claim 1 are patentable under 35 USC § 103 over *Cecconi* in view of *Andersen* and *Robbins*.

Independent claim 10 includes the substantive elements of claim 1 discussed above. Accordingly, claim 10 is patentable under 35 USC § 103 over *Cecconi* in view of *Andersen* and *Robbins* for the same reasons that claim 1 is patentable under 35 USC § 103 over *Cecconi* in view of *Andersen* and *Robbins*.

Independent claim 11 has been amended to specify that the coded signal include an arbitrary pattern. As in the case of claim 1, the Examiner is relying on *Andersen* for the teaching of coded seismic signals. Applicant notes that the each sweep signal in *Andersen* comprises a swept frequency signal, and the successive sweeps have a predetermined phase relation to each other. Hence they do not have an arbitrary pattern.

In order to sustain a rejection under 35 USC § 103, the prior art of record must separately disclose all the elements of the claimed invention. In addition, there must be a teaching or suggestion in the prior art of record to combine the references to come up with the claimed invention.

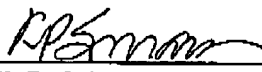
In the present instance, at least one element of claim 11 is not disclosed in the references cited by the Examiner. Accordingly, applicant submits that claim 11 is patentable under 35 USC § 103 over *Cecconi* in view of *Andersen* and *Robbins*.

The application is now believed to be in condition for allowance.

No fee is believed due for this document. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. **02-0429 (414-35351-US)**.

Respectfully submitted,

Dated: 13 June 2006

  
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